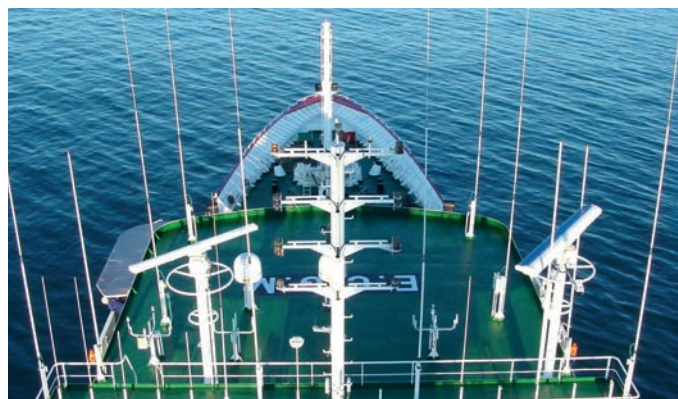


# MARINE CATALOGUE

Antennas & Accessories



2018

# THE WORLD'S ULTIMATE ANTENNAS.



**AC ANTENNAS** 

Antennas. They mean everything to us.

In a world where two-thirds of the globe is covered by water, marine antenna products are our world.

Since 1970, AC Antennas has been known for our relentless commitment in utilizing our +45 years of experience towards one pure goal: providing the best antennas in the world.

Today we have a large portfolio of marine, land based and portable antennas.

Our marine products are engineered and manufactured in Denmark to the highest possible quality level for vessels within the major marine markets of; commercial, fishing and yachting. All of our products are distributed worldwide through our professional partners.

We take pride in our products and our worldwide partners but even more in our loyal and faithful customers throughout decades.

Welcome to our world. Welcome to a world of antennas.

## CX4

100011-T

Professional VHF-antenna recommended by major radio manufacturers:

- Excellent RF specifications
- Exceptional material quality
- The benchmark 0 dBd VHF antenna for the maritime industry
- Recommended for AIS-solutions
- Can also be used for land based solutions

## Specifications

Frequency	Gain	Power	VSWR
146-162.5MHz	0 dBd	100W	<1.5:1
Connector	Length	Weight	Thread
UHF	1.26m	0.5kg	1" and 1 1/4"
DC Shorted	DC Grounded		
Yes	Yes		



## CX3 5/8

130002-T

Professional VHF-antenna recommended by major radio manufacturers:

- Excellent RF specifications
- Exceptional material quality
- The benchmark 3 dBd VHF antenna for the maritime industry
- Recommended for AIS-solutions
- Can also be used for land based solutions

## Specifications

Frequency	Gain	Power	VSWR
156-162.5MHz	3 dBd	100W	<1.5:1
Connector	Length	Weight	Thread
UHF	2.6m	0.7kg	1" and 1 1/4"
DC Shorted	DC Grounded		
Yes	Yes		



## CX4 types

Product name	Product number	Frequency [MHz]	Connector [female]	Mount included
CX4-1	100012-T	146-162.5	N	N240F
CX4-2	100038-T	146-162.5	UHF	N162F
CX4-3	100015-T	146-162.5	UHF	-
CX4-4	100039-T	146-162.5	N	N275F
CX4-5	100040-T	146-162.5	UHF	N171F
CX4-6	100017-T	146-162.5	N	-
CX4-8	100018-T	135-150	UHF	-
CX4-9	100019-T	118-137	N	-
CX4-11	100013-T	154-174	UHF	-
CX4-12	100014-T	154-174	N	-

## CX3 5/8 types

Product name	Product number	Frequency [MHz]	Connector [female]	Mount included
CX3 5/8	130002-T	156-162.5	UHF	N240F
CX3 5/8-1	130003-T	156-162.5	N	N240F
CX3 5/8-10	130004-T	156-162.5	UHF	-



**THIS IS NOT AN ANTENNA.  
IT IS 20 PARTS  
THOROUGHLY PUT TOGETHER.**

**WE CRIMP OUR ANTENNAS.  
4-5 TIMES STRONGER BUILD-UP  
DUE TO CRIMPING.**



**CELmar0-1**

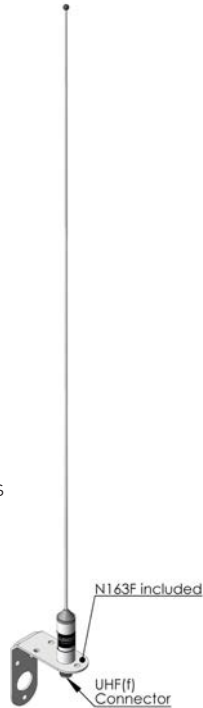
100000-P

Stainless steel sailboat omnidirectional VHF-antenna, suitable for rail or mast mounting:

- Excellent RF specifications
- Exceptional material quality
- Designed for harsh environment conditions
- Tunable version available
- Recommended for AIS-solutions
- Suitable for DAB/FM reception
- Available with fibreglass radome too: CELmarVHF and CELmar1-1
- Can also be used for land based solutions

**Specifications**

Frequency	Gain	Power	VSWR
156-162.5MHz	0 dBd	100W	<1.5:1
Connector	Length	Weight	Thread
UHF	1.0m	0.4kg	5/8" 24TPI
DC Shorted	DC Grounded		
No	Yes		

**CELmar2-1**

100005-P

High quality lightweight omnidirectional fibreglass antenna, equipped with ferrule:

- Excellent RF specifications
- Exceptional material quality
- Installation directly onto 1"-14TPI mounts
- Cable length variants available
- Recommended for AIS-solutions
- Suitable for DAB/FM reception
- Can also be used for land based solutions

**Specifications**

Frequency	Gain	Power	VSWR
156-162.5MHz	0 dBd	100W	<1.5:1
Cable	Length	Weight	Thread
RG58C/U	1.05m	0.6kg	1" ferrule
DC Shorted	DC Grounded		
No	No		

**CELmar3-1**

130000-P

High quality lightweight omnidirectional fibreglass antenna, equipped with ferrule:

- Excellent RF specifications
- Exceptional material quality
- Installation directly onto 1"-14TPI mounts
- Various cable length variants available
- Recommended for AIS-solutions
- Suitable for DAB/FM reception
- Can also be used for land based solutions

**Specifications**

Frequency	Gain	Power	VSWR
156-162.5MHz	3 dBd	100W	<1.5:1
Cable	Length	Weight	Thread
RG58C/U	2.7m	0.9kg	1" ferrule
DC Shorted	DC Grounded		
Yes	Yes		

**VHFlight100**

100024-C

Omnidirectional whip antenna in glass fibre suitable for leisure boats etc. The antenna is equipped with the installation friendly Celwave base:

- Excellent RF specifications
- Exceptional material quality
- Various cable and mounts available
- Suitable for DAB/FM reception

**Specifications**

Frequency	Gain	Power	VSWR
156-162.5MHz	0 dBd	100W	<1.5:1
Connector	Length	Weight	Thread
UHF	1.14m	0.3kg	1" ferrule
DC Shorted	DC Grounded		
No	Yes		



**KUM480**

248000-P

Professional HF/SSB-antenna recommended by major radio manufacturers:

- Excellent RF specifications
- Exceptional material quality
- Works with Automatic Tuner Unit systems
- Wire and coax cable installations
- Tx/Rx or Rx only
- 0.15-30MHz for Rx coach only
- Sidedfed
- Various mechanical installation options including ferrule and wall mounting
- Can also be used for land based solutions

**Specifications**

Frequency	Power	Max HF Voltage
1.4-30MHz	500W	9kV
Sections	Length	Weight
2	4.8m	2kg
		Static Capacity
		55pF

**KUM600**

260000-P

Professional HF/SSB-antenna recommended by major radio manufacturers:

- Excellent RF specifications
- Exceptional material quality
- Works with Automatic Tuner Unit systems
- Wire and coax cable installations
- Tx/Rx or Rx only
- 0.15-30MHz for Rx coach only
- Sidedfed
- Various mechanical installation options including ferrule and wall mounting
- Available as 2- and 3-section models
- Can also be used for land based solutions

**Specifications**

Frequency	Power	Max HF Voltage
1.4-30MHz	750W	9kV
Sections	Length	Weight
2	6m	2.5kg
		Static Capacity
		70pF

**KUM803**

280300-T

Professional HF/SSB-antenna recommended by major radio manufacturers:

- Excellent RF specifications
- Exceptional material quality
- Works with Automatic Tuner Unit systems
- Wire and coax cable installations
- Tx/Rx or Rx only
- 0.15-30MHz for Rx coax only
- Sidedfed
- Various mechanical installation options including wall and deck mounting
- Available as 2- and 3-section models
- Can also be used for land based solutions

**Specifications**

Frequency	Power	Max HF Voltage
1.4-30MHz	1200W	18kV
Sections	Length	Weight
3	8m	7kg
		Static Capacity
		100pF

**KUM903**

290300-T

Professional HF/SSB-antenna recommended by major radio manufacturers:

- Excellent RF specifications
- Exceptional material quality
- Works with Automatic Tuner Unit systems
- Wire and coax cable installations
- Tx/Rx or Rx only
- 0.15-30MHz for Rx coax only
- Sidedfed
- Various mechanical installation options including wall and deck mounting
- Available as 2- and 3-section models
- Can also be used for land based solutions

**Specifications**

Frequency	Power	Max HF Voltage
1.4-30MHz	1200W	18kV
Sections	Length	Weight
3	9m	8kg
		Static Capacity
		100pF





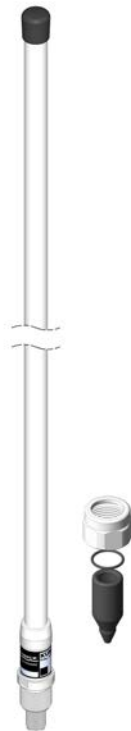
**KUM121**

212100-T

Professional HF-antenna recommended by major radio manufacturers:

KUM121 is a high quality omnidirectional active receiving HF antenna with excellent dynamic range in the entire bandwidth.

- Excellent RF specifications
- Exceptional material quality
- Low noise figure
- Diode protection of RF and DC inputs
- Grounded through mounting base
- Can also be used for land based solutions

**Specifications**

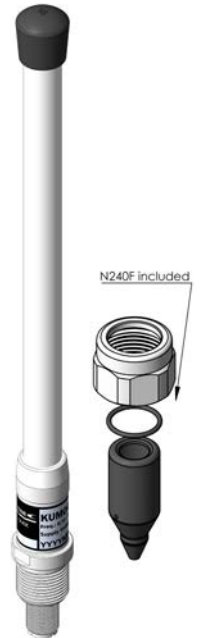
Frequency	DC Shorted	DC Grounded	Gain
0.15-30MHz	No	Yes	0dB
Connector	Length	Weight	IP2
UHF	1.3m	0.5kg	≥+50dBm
			IP3
			≥+28dBm
Supply Voltage	Max Supply Current	Max Output	
9-12V	35 mA	+10dBm	

**KUM041**

204100-T

KUM041 is a high quality omnidirectional active receiving HF antenna with excellent dynamic range in the entire bandwidth.

- Excellent RF specifications
- Exceptional material quality
- Low noise figure
- Diode protection of RF and DC inputs
- Grounded through mounting base
- Can also be used for land based solutions

**Specifications**

Frequency	DC Shorted	DC Grounded	
0.15-30MHz	No	Yes	
Connector	Length	Weight	IP3@10MHz
UHF	0.4m	0.4kg	≥+38dBm
Supply Voltage	Max Supply Current		
9-12V	30 mA		

**NUKA ARCTICA**

**SEA TRIAL VESSEL FOR KUM121, APRIL-JUNE 2016.**

**QUALITY.  
TO PROFESSIONALS.  
BY PROFESSIONALS.**



**CXU1**

300000-T

For use with radio telephone, two-way business radio and many other applications:

- Excellent RF specifications
- Exceptional material quality
- Designed for harsh environment
- Various sub band antennas available
- Can also be used for land based solutions

**Specifications**

Frequency	Gain	Power	VSWR
450-470MHz	0 dBd	100W	<1.5:1
Connector	Length	Weight	Thread
N	0.8m	0.5kg	1" and 1 1/4"
DC Shorted	DC Grounded		
Yes	Yes		



**CXU3**

330000-T

For use with radio telephone, two-way business radio and many other applications:

- Excellent RF specifications
- Exceptional material quality
- Designed for harsh environment
- Various sub band antennas available
- Can also be used for land based solutions

**Specifications**

Frequency	Gain	Power	VSWR
450-470MHz	3 dBd	100W	<1.5:1
Connector	Length	Weight	Thread
N	1.4m	0.7kg	1" and 1 1/4"
DC Shorted	DC Grounded		
Yes	Yes		



**CXU4**

350000-T

For use with radio telephone, two-way business radio and many other applications:

- Excellent RF specifications
- Exceptional material quality
- Designed for harsh environment
- Various sub band antennas available
- Can also be used for land based solutions

**Specifications**

Frequency	Gain	Power	VSWR
440-470MHz	5 dBd	100W	<1.5:1
Connector	Length	Weight	Thread
N	2.2m	2.1kg	1" and 1 1/4"
DC Shorted	DC Grounded		
Yes	Yes		



**UHF/VHF2**

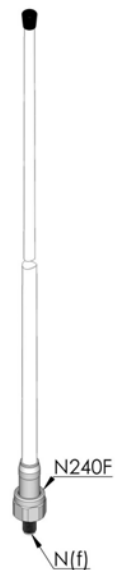
400036-T

Omnidirectional dipole antenna covering two bands, marine VHF and mid -UHF sub-band:

- Excellent RF specifications
- Exceptional material quality
- Designed for harsh environment
- Can also be used for land based solutions

**Specifications**

Frequency	Gain	Power	VSWR
146-162.5&420-440MHz	0 dBd	100W	<1.5/5:1
Connector	Length	Weight	Thread
N	1.3m	0.6kg	1" and 1 1/4"
DC Shorted	DC Grounded		
Yes	Yes		



## 4GMultiband

400006-T

Omnidirectional multiband antenna covering the cellular phone network bands simultaneously with data transmission, thus improving the communication performance for e.g. 3G, 4G, CDMA, UMTS, DECT, WLAN, GSM850/900/1800/1900, Bluetooth and EDGE:

- Excellent RF specifications
- Exceptional material quality
- Can also be used for land based solutions



### Specifications

Frequency	Gain	Power	VSWR
806-960/1710-2690MHz	0 dBd	40W	<2/2.2:1
Connector	Length	Weight	Thread
N	0.5m	0.3kg	1" and 1 1/4"
DC Shorted	DC Grounded		
No	Yes		

## GPS

490000-P

Marine and land based antenna for the frequency 1575.42 MHz band. The GPS antenna can be installed directly on the deck, it withstands walking pressure:

- Excellent RF specifications
- Exceptional material quality
- Can also be used for land based solutions



### Specifications

Frequency	Gain	Supply voltage	VSWR
1575.42MHz	26dB	3-5.5V	<2:1
Connector	Length	Weight	Noise Figure
FME	0.05m	0.06kg	Typ. 1.35dB
DC Shorted	DC Grounded		
No	Yes		

## VHF/GPS

490001-T

VHF/GPS is a VHF antenna with a combined helix GPS and GLONASS antenna for frequencies 1575.42 MHz & 1602 MHz incorporated:

- Excellent RF specifications
- Exceptional material quality
- Cable sets with filter available
- Designed for harsh environment
- Can also be used for land based solutions



### Specifications

Frequency	Power	VSWR	
156-162.5/1575.42/1602MHz	35W	<2:1	
Connector	Length	Weight	Thread
N	1.1m	0.7kg	1" and 1 1/4"
Supply voltage	Current	Gain	
3.3-18V	Max 10, typ 7mA	0/18/18 dB	
DC Shorted	DC Grounded		
No	Yes		

## VHF/GPS types

Product name	Product number	Cable 1 connector	Cable 2 connector	Cable 3 connector
VHF/GPS	490001-T	-	-	-
VHF/GPS-01	490011-T *	N-female	UHF-male	-
VHF/GPS-02	490012-T *	BNC-female	TNC-male	-
VHF/GPS-03	490013-T *	N-female	N-male	TNC-male
VHF/GPS-04	490014-T *	TNC-male	UHF-male	-
VHF/GPS-05	490015-T *	BNC-male	TNC-male	UHF-male

No\*: VHF/GPS antenna and filter included

**DAB-FM**

400035-T

Professional omnidirectional dipole receiving antenna covers both the DAB frequency (160-250MHz) and the FM frequency (88-108MHz):

- Excellent RF specifications
- Exceptional material quality
- Designed for harsh environment
- Can also be used for land based solutions

**Specifications**

Frequency	88-108/160-250MHz		
Connector	Length	Weight	Thread
N	1.3m	0.5kg	1" and 1 1/4"
DC Shorted	DC Grounded		
Yes	Yes		

**FAME1**

400004-T

High quality fiberglass omnidirectional receiving DAB/FM/AM antenna:

- Excellent RF specifications
- Exceptional material quality
- Also available with 1" ferrule and sidedfed cable
- Designed for harsh environment
- Can also be used for land based solutions

**Specifications**

Frequency	0.15-30/88-108/160-250MHz		Gain
Connector	Length	Weight	Thread
UHF	1.3m	0.5kg	1" and 1 1/4"
DC Shorted	DC Grounded		
No	Yes		

**CB6**

100051-P

Lightweight fibreglass omnidirectional antenna for the citizen band:

- Excellent RF specifications
- Exceptional material quality
- Sidedfed
- Designed for harsh environment

**Specifications**

Frequency	Gain	VSWR	
26.8-27.5MHz	3 dBd	<1.5:1	
Cable	Length	Weight	Thread
RG58C/U	2.7m	0.8kg	1" ferrule
DC Shorted	DC Grounded		
Yes	Yes		

**FAME3**

430012-T

High quality fiberglass omnidirectional receiving DAB/FM/AM antenna:

- Excellent RF specifications
- Exceptional material quality
- Also available with 1" ferrule and sidedfed cable
- Designed for harsh environment
- Can also be used for land based solutions

**Specifications**

Frequency	0.15-30/88-108/160-250MHz		Gain
Connector	Length	Weight	Thread
UHF	2.7m	0.6kg	1" and 1 1/4"
DC Shorted	DC Grounded		
No	Yes		



**MORE THAN 90% OF OUR ORDERS  
ARE SHIPPED WITHIN 48 HOURS.**



**N274F**

900060-B



Universal Pole Ø20-58mm

Anodised Aluminium, black

0.8kg 1 1/4"-11 TPI, male

**N274FW**

900061-B



Universal Pole Ø20-58mm

Anodised Aluminium, white

0.8kg 1 1/4"-11 TPI, male

**N275F**

900018-B



Universal Pole Ø20-58mm

Anodised Aluminium, black

0.7kg 1" 14 TPI, female

**N275FW**

900062-B



Universal Pole Ø20-58mm

Anodised Aluminium, white

0.7kg 1" 14 TPI, female

**N270F**

900017-B



Heavy duty Pole Ø30-75mm

Solid Brass, white

1.4kg 1 1/4"-11 TPI, male

**N298F**

900027-P



Universal Pole Ø26-46mm

Stainless Steel

0.8kg 1 1/4"-11 TPI, male

**N220F**

900013-P



Universal Pole Ø26-46mm

Stainless Steel

0.5kg 1"-14 TPI, male

**N285F**

900044-B



4-way Ratchet Deck/wall

Chrome Brass

1.0kg 1"-14 TPI, male

**E179F**

900037-B



Deck

Chrome brass Deck

0.7kg 1 1/4"-11 TPI, male

**E180F**

900038-B



Deck

Stainless steel

0.3kg 1 1/4"-11 TPI, male

**N288F**

900046-B



Deck

Stainless steel

0.7kg 1"-14 TPI, male

**N286F**

900045-B



4-way Ratchet Deck/wall

Stainless Steel

0.7kg 1"-14 TPI, male

**N157F**

900002-P



Universal Pole Ø20-26mm

SS316 Ø5/8" &amp; Ø1"

0.2kg 1"-14 TPI, female

**N158F**

900003-P



Universal Pole Ø20-26mm

SS316 Ø5/8" &amp; Ø1"

0.2kg 1"-14 TPI, male

**N162F**

900004-P



Universal Pole

SS304 Ø5/8" &amp; Ø1"

0.2kg 1"-14 TPI, female

**N290F**

900047-B



4-way ratchet Deck/wall

Nylon

0.3kg 1"-14 TPI, male

**N171F**

900006-B



Universal Pole Ø30-61mm

SS316

0.7kg 1"-14 TPI, female

Option with ferrule bolt: N171FB

**N172F**

900008-B



Universal Pole Ø30-61mm

SS316 Alignment beads

0.6kg 1"-14 TPI, female

Option with ferrule bolt: N172FB

**N173F**

900010-B



Universal Pole Ø49-90mm

SS316 Alignment beads

0.8kg 1"-14 TPI, female

Option with ferrule bolt: N173FB

**N174F**

900057-B



Universal Pole Ø30-61mm

SS316 Alignment beads

0.7kg 1"-14 TPI, female

Option with ferrule bolt: N174FB

**N095F**

900000-B



Pole clamp Ø30-100mm

SS316

1.2kg Ø21mm radome

Note: Set of 2\*N095F per antenna

**N115F**

900001-B



Pole clamp Ø38-70mm

SS316

1.8kg Ø40mm radome w/sleeve

Note: Set of 2\*N115F per antenna

**N245F**

900039-P



Pole clamp Ø31-60mm

SS316

0.4kg Fits e.g. CX4-3

**H022F**

990013-A



Insulator

PBT 100 kV

0.3kg 9 kN



**N280-01F**

900019-P



- Adaptor
- Lateral cable hole
- Chrome brass
- 0.2kg
- 2 \* 1"-14 TPI, female

**N280-03F**

900021-P



- Adaptor
- Lateral cable hole
- Chrome brass
- 0.4kg
- 1" 14 TPI female & 1 1/4" 11 TPI male

**N280-04F**

900022-P



- Adaptor
- Chrome brass
- 0.3kg
- 1" 14 TPI female & 1 1/4" 11 TPI male

**N280F**

990009-P



- Adaptor & cable
- Lateral cable hole
- Chrome brass
- UHF male
- 0.6kg
- RG58 cable
- 6m
- 1" 14 TPI female & 1 1/4" 11 TPI male

**H001F**

990017-P



- Cable feed-through
- RG213
- Stainless steel
- 0.1kg
- Option RG58: H010F

**H012F**

990012-P



- Cable feed-through
- PVC
- RG58 & RG213
- 0.1kg

**CA-58-060**

920021-A



- RG58 cable
- 6m
- FME-female connectors on cable
- 0.4kg
- UHF-male adaptor enclosed

**CA-213-250**

920027-A



- RG213 cable
- 25m
- FME-female connectors on cable
- 4kg
- UHF-male adaptor enclosed

**N**

910001-A



- Connector
- RG213/RG214
- Crimp
- 0.1kg
- N-male

**K008F**

910009-A



- Connector
- RG213/RG214
- Crimp
- 0.1kg
- UHF-male

**BNC**

910000-A



- Connector
- RG58
- Crimp
- 0.1kg
- BNC-male

**R003F**

920016-A



- RG58 cable
- 100m
- 4.2kg
- Option: RG213

### Gain Reference

Gain is one of the main parameters of an antenna. The gain of an antenna is a figure stating how much energy this antenna transmits/receives in the main direction, compared to a reference antenna.

$$\text{Gain} = 10 \log \left( \frac{\text{ant.}}{\text{reference ant.}} \right)$$

Hypothetical the reference antenna is isotropic, which uniformly distributes energy in all directions.

This gain is stated as dBi.

Normally the reference antenna is a half wave dipole antenna and then the unit is dBd.

Conversion between the two follows this simple equation:

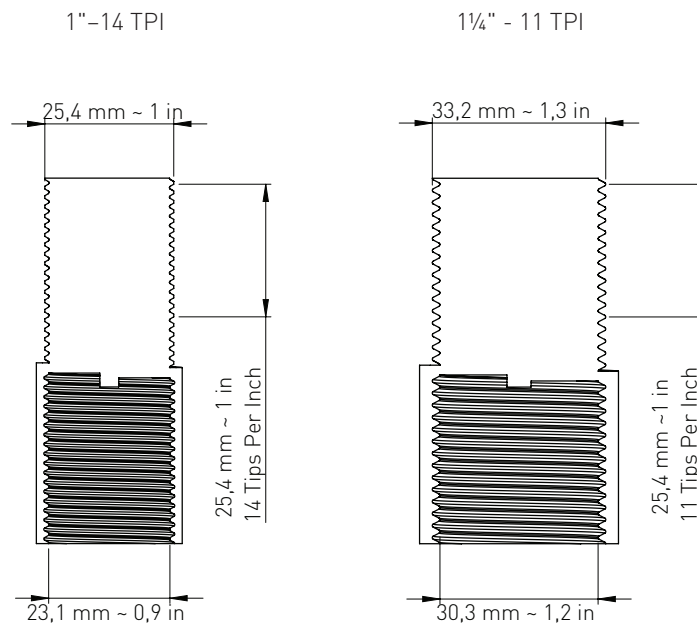
$$\text{dBd} = \text{dBi} - 2.15$$

For marine use in most countries the gain is mentioned in "marine" dB which is non-existing. However, as the competition is using "marine" dB, AC Marine has decided to indicate gain in dBd and "marine" dB.

Below please find a table of relationship between dBd, dBi and "Marine" dB.

dBd	dBi	Marine dB
0	2.1	3
3	5.1	6
4.5	6.6	9
5	7.1	10

### Mount Reference



**MORE THAN 45 YEARS IN BUSINESS.  
THANKS TO OUR CUSTOMERS.**



Our products are designed and manufactured to provide exceptional performance and to withstand punishment from the rigorous marine environment.

We use latest generation of technology to continue pushing technical performance for the betterment of our products. Navigating complexity, unlocking potential.

We are cost effective and deliver on time. Always.

Welcome to AC Antennas.



Fabriksparken 40. DK-2600 Glostrup. Denmark  
+45 4581 0413. [acantennas@acantennas.com](mailto:acantennas@acantennas.com)  
[www.acantennas.com](http://www.acantennas.com)